

To Mr. Howard Weiss

Re Art Unit 284

Total 18 Pages

RECEIVED  
CENTRAL FAX CENTERYingjian Chen  
1123 Wisteria Drive  
Fremont, CA 94539  
510-449-7813

JUN 11 2005

Re: Application Number: 10/611,448  
Filing Date: July 1, 2003

Dear Mr. Weiss:

I really appreciate your time and patience two weeks ago when we discussed on the phone regarding this case. I hereby enclosed a request for your kind re-consideration of the newly amended claims and argument regarding the office action dated May 9, 2005.

To make a long story short, I amended the claims so that "exterior cylindrical surface" of a nanotube is clearly defined and is distinct from other physical part of the nanotube, i.e. the interior cylindrical surface and the two ends of the nanotube. This makes the claims clearly distinguishable from Shin et al., Zhang et al. I've enclosed two references for your kind attention. The references illustrate how carbon nanotubes grow from catalyst particles in chemical vapor deposition (CVD) process, as in Zhang et al, or Shin et al. It can be concluded that catalyst particles may only be attached to one or both ends of the nanotubes after CVD growth.

It is noted that the cited patent by Mao et al. claimed a device comprising a mixture of carbon nanotubes and particles (there is no mentioning of word "attach" anywhere in that patent). I looked up the word "mixture", it means "an aggregate of two or more substances which are not chemically united and which exist in no fixed proportion to each other" (Webster's Dictionary). In contrast to our invention, a carbon nanotube with attached magnetic nanoparticles forms an independent entity by itself, and is characterized by the existence of bonds between the nanotube and the nanoparticle. In addition, magnetic nanoparticles are the key element to the functionality of the devices we claimed, which are not covered by the descriptions or claims in Mao et al.

I'm hoping to schedule a telephone conversation with you to briefly discuss aforementioned points and any other questions you may have regarding the amended claims or the remarks attached.

Sincerely yours,

  
Yingjian Chen

6/9/05

RECEIVED  
CENTRAL FAX CENTER

JUN 11 2005

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Inventor: Yingjian Chen et al. Ser. No.: 10/611,448

Filing Date: July 1, 2003 Examiner: Howard Weiss

Atty. Docket No.: XYNANO-1 GAU: 2814

For: NANOTUBE DEVICES AND METHOD OF FABRICATION BY MAGNETICALLY-  
ASSISTED ASSEMBLY

June 6, 2005

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450Request for Reconsideration and Amendment to Claims

Dear Mr. Weiss:

Responsive to an Office Action mailed May 9, 2005, please kindly consider these facts  
and enter the following Amendment to the Claims.

Amendment to App. Ser. No. 10/611,448

2